Army Regulation 11–27

Army Programs

Army Energy Program

Headquarters
Department of the Army
Washington, DC
3 February 1997

UNCLASSIFIED

SUMMARY of CHANGE

AR 11–27
Army Energy Program

This revision updates policies and procedures concerning the Army’s Energy Program. Primarily this revision--

- Implements all current Executive Orders and DOD Directives pertaining to the Energy Program.

- Expands the responsibilities of the Assistant Chief of Staff for Installation Management (para 1-4).

- Includes ridesharing as part of the installation or activity commanders responsibilities (para 1-4).

- Provides information on the energy policy for leased DOD facilities (para 3-17).

- Changes the composition of the Army Advisory Group on Energy (para 7-2).

- Provides information on the Energy Management Professional Enhancement Program (para 8-2).

- Provides latest criteria for the Secretary of the Army Energy Conservation Award Evaluation (para B-1).

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Effective 3 March 1997

Army Programs

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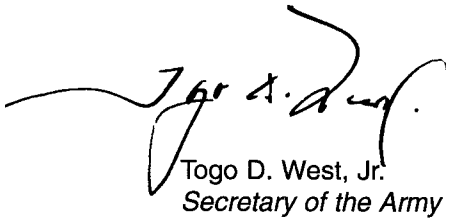

History. This issue publishes a revision of this publication. Because the publication has been extensively revised, the changed portions have not been highlighted.

Summary. This regulation establishes policies, procedures, and responsibilities for the Army Energy Program.

Applicability. This regulation applies to the Active Army, the U.S. Army Reserve, and Army National Guard installations and sites operated and maintained by Federal funds. It also applies to all Government-owned, contractor-operated (GOCO) activities and installations contracted by the Army and all facilities leased by the Army.

Proponent and exception authority. The proponent of this regulation is the Deputy Chief of Staff for Logistics. The proponent has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation. Proponents may delegate this approval authority, in writing, to a division chief under their supervision within the proponent agency in the grade of Colonel or the civilian equivalent.

Army management control process. This regulation contains management control provisions in accordance with AR 11-2, but does not contain checklists for conducting management control reviews used to accomplish assessment of management controls.

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from HQDA (DALO-TSE), WASH DC 20310-0516.

Interim changes. Interim changes to this regulation are not official unless they are authenticated by the Administrative Assistant to Secretary of the Army. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Deputy Chief of Staff for Logistics, ATTN: DALO-TSE, 500 Army Pentagon, WASH DC 20310-0516.

Distribution. Distribution of this publication is make in accordance with the initial distribution number (IDN) 09205, intended for command level B for Active Army, Army National Guard, and U.S. Army Reserve.

Contents (Listed by paragraph and page number)

*This regulation supersedes AR 11-27, 14 July 1989.

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Contents—Continued

Chapter 1
Introduction

1–1. Purpose

This regulation updates policies, procedures, and responsibilities for the Army Energy Program (AEP). The AEP objectives are to—

a. Ensure the availability and supply of energy to the Army in accordance with mission, readiness, and "quality of life" priorities.

b. Participate in the national effort to conserve energy and water resources without degrading readiness, the environment, or quality of life.

c. Attain established energy and water conservation goals.

d. Participate in research and development (R&D) efforts regarding new and improved energy technologies contributing to defense and energy conservation.

1–2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1–4. Responsibilities

a. The Deputy Chief of Staff for Logistics (DCSLOG) will maintain an Army Energy Office that will—

(1) Exercise overall Army General Staff responsibility for planning, directing, and coordinating the AEP.

(2) Maintain and update the Army Energy Resources Management Plan (ERMP). Provide specific objectives for fiscal year (FY) 2005. This will be done with assistance of and in coordination with the Army Staff.

(3) Conduct, with the assistance of the Army Staff, a continuing review of Department of the Army (DA) statutory and regulatory authority, policies, procedures, and programs. The purpose of this review is to eliminate inconsistencies or deficiencies that could constrain the AEP.

(4) Formulate and recommend coordinated DA policy for the allocation, supply, conservation, and management of energy resources within the Army.

(5) Advise the Secretary of the Army's Special Assistant for Energy on energy matters through the Director of Transportation, Energy and Troop Support (DALO-TSZ-A).

(6) Provide principal Army Staff advisers on energy as well as backup expertise advisers to principal DA witnesses appearing before the Office of the Secretary of Defense (OSD), Office of Management and Budget, or Congress on energy-related matters.

(7) Function as primary Army Staff contact with the following on energy matters:

(a) OSD.

(b) Army Secretariat.

(c) Defense Logistics Agency (DLA).

(d) Other Government and military departments.

(e) Civilian sector.

(8) Develop and supervise an effective management information and evaluation element for the AEP to include Army's participation in the Defense Utilities Energy Reporting System (DUERS).

(9) Provide oversight to the Army DUERS Data System (RADDS) to meet reporting and program management needs.

(10) Monitor the consumption of energy in the testing, adoption, production, and life cycle management of new items of Army materiel.

(11) Appoint an Army employee transportation coordinator per DODI 4500.44, January 1982.

(12) Participate in the planning, programming, execution, and budget process for all Army energy matters. Participation will include the following:

(a) Development of energy and water resource allocations.

(b) Monitoring of Army-wide consumption of energy and water.

(c) Development and preparation of budget data and justifications.

(13) Develop and coordinate the DA position on energy-related actions generated by audit and inspection activities of the following:

(a) General Accounting Office (GAO).

(b) Department of Defense (DoD).

(c) The Inspector General and The Auditor General of the Army.

(14) Review joint and Army strategic plans to ensure consideration and incorporation of appropriate energy input.

(15) Ensure compatibility between the AEP and the Army Environmental Program. (See AR 200-1.)

(16) Coordinate with the following to ensure a continuing exchange of information and ideas:

(a) Other military Services.

(b) Director of Energy Policy, OSD.

(c) DLA.

(d) Department of Energy (DOE).

(e) Environmental Protection Agency (EPA).

(f) Other Federal and State agencies.

(g) Professional societies.

(h) Educational and scientific institutions.

(i) Industry.

(17) Conduct Army energy awareness seminars and ensure follow-on field surveys to maintain field-level interest and receive feedback on accomplishments and problem areas.

(18) Provide support on transportation and traffic management concepts, plans, and policies.

b. The Deputy Chief of Staff for Operations and Plans (DCSOPS) will—

(1) Establish overall operational priorities for distribution and use of fuels and other sources of energy.

(2) Ensure recognition of the provisions of this regulation during the development of the following:

(a) Army aspects of national strategy.

(b) Army force requirements.

(c) Strategic mobility requirements.

(d) Overall roles and missions of the Army.

(3) Develop and provide policy guidance that will emphasize that major commanders will—

(a) Plan and schedule unit training and exercises within guidance of the AEP.

(b) Ensure that individual soldiers are trained in and practice energy conservation during unit training and exercises.

(4) Ensure that an appreciation of the energy problem and training in energy conservation techniques are incorporated in the curriculum and training programs of all schools and training centers.

(5) Review current procedures for establishment of materiel requirements to ensure recognition of the AEP objectives.

c. The Deputy Chief of Staff for Personnel (DCSPER), where applicable, will—

(1) Support the Energy Conservation Awards Program.

(2) Incorporate energy conservation considerations and objectives in all personnel-related actions. Such actions include clothing standards and morale activities.

d. The Assistant Chief of Staff for Installation Management (ACSIM) will develop and manage the facilities portion of the AEP and will—

(1) Budget for facility energy program and establish priorities for available funding.

(2) Provide guidance and oversight for energy R&D programs.

(3) Program and manage the Energy Conservation Investment Program (ECIP) and the Federal Energy Management Program (FEMP).

(4) Ensure that funding of R&D that improves energy efficiency is given high priority.

(5) Participate in the Army Energy Awareness Seminar Program.

(6) Provide guidance for updating the facilities portion of the Army ERMP.

e. The Chief of Engineers (COE) will—

(1) Implement the Energy Conservation Investment Program (ECIP).

(2) Develop and update construction standards to meet minimum established energy efficiency standards.

(3) Implement cost effective energy conservation technology and renewable energy use in all construction programs.

(4) Develop and implement R&D programs for the following specific energy technologies assigned by DoD and the ACSIM:

(a) Establish coordination mechanisms.

(b) Develop coordinated DoD-wide program plans, objectives, and implementing responsibilities.

(c) Encourage, through the Defense Energy Policy Council (DEPC), emphasis on the most important areas.

(d) Promote efficient use of DoD resources.

(e) Sponsor the development of specifications, standards, handbooks, and other mechanisms to promote the beneficial use of energy technologies.

(f) Provide for technology transfer, including the exchange of information.

(g) Report policy matters that require resolution to the DEPC and ACSIM.

(7) Maintain a list of technical monitors for all Army facility energy R&D programs. The name, agency, telephone number, and address of the technical monitor for each program will be provided to HQDA (DALO-TSE), 500 Army Pentagon, WASH DC 20310-0500.

(8) Participate in Army energy awareness seminars.

(9) Assist in the development and update of the facilities portion of the Army ERMP.

(10) Operate and maintain the Army DUERS Data System (RADDS) in accordance with the ERMP.

(11) Provide public affairs support for the AEP.

(12) Manage the Army Energy Security/Contingency Program per DEPPM 86-2 and DEPPM 88-3.

(13) Conduct comprehensive facility energy audits per Executive Order 12902.

(14) Develop, maintain, monitor, update and offer energy manager training course that meets the requirements of current policy.

(15) Provide technical support to the ACSIM.

(16) Participate in teaching the Energy Coordinator Course.

f. The Surgeon General (TSG) will provide guidance on health and preventive medicine aspects of the AEP.

g. The Chief of Public Affairs (CPA) will—

(1) Distribute energy and water conservation information materials.

(2) Coordinate releases, photographs, film footage, audio tapes, and other energy and water conservation material through the Office of the Assistant Secretary of Defense (Public Affairs) to the national media.

(3) Provide information and arrange for military speakers upon request from veteran and civilian groups in support of objectives of the AEP.

(4) Coordinate and arrange for public announcements, press conferences, releases, and news media interviews.

(5) Respond to queries received from the media and the public.

(6) Provide materials for inclusion in local command information activities in support of the program.

h. Heads of all Army Staff agencies, including the Chief, National Guard Bureau (CNGB), (Director of Army National Guard), and the Chief, Army Reserve (CAR) will—

(1) Ensure that energy considerations are included in agency functional responsibilities.

(2) Coordinate all plans and actions which impact on energy matters with the Army Energy Office, DALO-TSE.

(3) Maintain a single point of contact (POC) to expedite staff actions on energy matters and to disseminate essential information within each agency. The name, rank, agency, and telephone number of the agency POC will be provided to HQDA (DALO-TSE), 500 Army Pentagon, WASH DC 20310-0500. This information will be submitted within 10 working days following receipt of this regulation and within 5 working days following a change.

i. Commanding General (CG), Army Materiel Command (AMC). CG, AMC, will—

(1) Develop R&D programs to resolve technological problems impacting on Army mobility energy use. The name, agency, and telephone number of the project managers will be provided to HQDA (DALO-TSE), WASH DC 20310-0500.

(2) Promote energy conservation in the development of Army materiel. Include energy consumption as a criterion for evaluation of alternative concepts for satisfying Army materiel requirements.

(3) Ensure that thorough consideration is given to the following:

(a) Conservation of energy in the development, acquisition, operation, manufacture, use, or disposal of Army materiel.

(b) Management of production base support programs and industrial modernization programs.

(4) Ensure that funding of R&D and materiel acquisition that improves energy efficiency is given priority.

j. Commanders at major Army command (MACOM) level will—

(1) Establish and maintain an active MACOM Energy and Water Management Office (EMO) with adequate staff to manage all Command Energy and Water Conservation matters.

(2) Personally and actively promote command energy and water conservation and community energy and water awareness activities.

(3) Designate a MACOM Energy Coordinator who is trained per the Energy Policy Act of 1992 to head the EMO and represent the MACOM in all energy and water matters. This POC will coordinate facilities, mobility, and R&D energy matters for the command. The name, grade, agency, mailing address, and telephone number of the agency POC will be provided to Commander, U.S. Army Logistics Integration Agency (USALIA), ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002. This information will be submitted within 15 working days following receipt of this regulation and within 5 working days following a change.

(4) Include energy and water conservation responsibilities in position descriptions of subordinate commanders, installation commanders, MACOM Energy Coordinators, their superiors, and, to the extent practical and appropriate, others critical to the implementation of Executive Order 12902. Include successful implementation of energy efficiency, water conservation, and solar and other renewable energy projects in performance evaluations.

(5) Encourage all installations to meet and/or exceed energy and water conservation goals. Assure those not meeting goals get the necessary assistance to get back on track to meet the goals.

(6) Use the incentive/suggestion awards program to promote and recognize energy and water conservation.

(7) Develop and maintain active energy and water conservation information programs.

(8) Ensure that installation energy consumption data is accurate and reported timely to RADDS.

(9) Develop and recommend candidate ECIP and FEMP projects.

(10) Appoint an employee transportation coordinator to promote the DoD Ridesharing Program. The name, grade, agency, mailing address, and telephone number of the coordinator will be provided to HQDA, (DALO-TSE), 500 Army Pentagon, WASH DC 20310-0500.

(11) Actively encourage common-sense energy and water conservation practices in all aspects of the professional and private conduct of members of the command.

(12) Review annually installation Energy Management Program for Internal Management Control and compliance with Executive Order 12902.

k. Installation commanders will—

(1) Establish and maintain an active EMO (EMO) with adequate staff to manage all command energy and water conservation matters.

(2) Personally and actively promote command emphasis on energy and water conservation and energy and water awareness activities.

(3) Designate an energy coordinator who is trained per the Energy Policy Act of 1992 to head the EMO and represent the installation in all energy and water matters. This POC will coordinate facilities, mobility, and R&D energy matters for the command. The name, grade, agency, mailing address, and telephone number of the

agency POC will be provided to Commander, U.S. Army Logistics Integration Agency (USALIA), ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002. This information will be submitted within 15 working days following receipt of this regulation and within 5 working days following a change.

(4) Include energy and water conservation responsibilities in position descriptions of facility managers, designers, energy managers, their superiors, and, to the extent practical and appropriate, others critical to the implementation of Executive Order 12902. Include successful implementation of energy efficiency, water conservation, and solar and other renewable energy projects in performance evaluations.

(5) *review the installation.* Ensure that the installation is meeting assigned goals or get the necessary assistance to get back on track to meet the goals.

(6) Appoint unit, area, and building energy monitors to implement and monitor energy and water programs.

(7) Establish command energy councils to serve as forums to formulate, coordinate, and disseminate energy and water policy and actions.

(8) Use the incentive awards program to promote and recognize energy and water conservation.

(9) Develop and maintain active energy and water information programs.

(10) Ensure that the installation's energy and water consumption data is accurate and reported timely to RADDS.

(11) Develop and recommend candidate ECIP and FEMP projects and EEAP studies.

(12) Appoint an employee transportation coordinator to promote the DoD Ridesharing Program. The name, grade, agency, mailing address, and telephone number of the coordinator will be provided to Commander, U.S. Army Logistics Integration Agency (USALIA), ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002.

(13) Actively encourage common-sense energy and water conservation practices in all aspects of the professional and private conduct of members of the command.

(14) Provide MACOM an annual report on internal control techniques to ensure compliance with Executive Order 12902.

l. Energy coordinators (ENCONs) at MACOM levels will—

(1) Serve as the commander's principal advisor and special staff assistant on all energy-related matters.

(2) Review the annual petroleum requirement quantities submitted to the U.S. Army Petroleum Center (USAPC) for consistency with command operating budget submissions.

(3) Develop and coordinate energy and water conservation awareness activities.

(4) Verify the accuracy and ensure the timeliness of RADDS-1 and RADDS-2 data submitted by installations through RADDS.

(5) Develop and maintain an active energy and water conservation program.

(6) Prepare MACOM annual energy conservation progress report for submittal to HQDA not later than (NLT) 1 Dec of each year.

(7) Submit Secretary of the Army and Federal Energy and Water Management Award nominations to HQDA NLT 15 Feb of each year.

(8) Serves as single POC on energy related matters and inquiries from HQDA.

m. Energy coordinators (ENCONs) at installation level will—

(1) Serve as the commander's principal advisor and special staff assistant on all energy and water conservation related matters.

(2) Actively participate in the command energy council.

(3) Review the annual petroleum requirement quantities submitted to the U.S. Army Petroleum Center (USAPC) for consistency with command operating budget submissions.

(4) Develop and coordinate energy and water conservation awareness activities.

(5) Verify the accuracy and insure the timeliness of RADDS-1 and RADDS-2 data submitted through RADDS.

(6) Develop and maintain an active energy program.

(7) Conduct energy surveys at least annually.

(8) Prepare installation annual energy conservation progress report for submittal each year.

(9) Submit Secretary of the Army and Federal Energy and Water Management Award nominations each year.

(10) Serves as single POC on energy related matters and inquiries.

n. Commanders of Army tenant activities will comply with and support the host installation's energy program.

o. Specification writers and requirements personnel will ensure that the provisions of the AEP are included in the statement of work and contract specifications of contracts for the operation of Army activities including Government-owened, contractor-operated (GOCO), and that energy incentives are incorporated where appropriate.

1–5. Guidelines

a. Army energy and water resources will be intensively managed to ensure their efficient and effective use in support of mission requirements.

b. Energy and water management programs will not impair the training, readiness, and combat capability of the Army. Such programs will not impair the health and safety of military and civilian personnel. This regulation will not be cited as authority to eliminate, defer, or reduce personnel programs commonly associated with quality of life objectives. These are objectives aimed at improving the living and working environment in the Army.

c. Energy and water efficiency and availability will be a factor in the decision process and will be stressed in the design, development, procurement, production, and operation of equipment, weapon systems, and facilities. This regulation will not be cited as authority to place additional burden on weapon system program managers or supplement DoD 5000-series guidance on Defense acquisition.

d. Energy and water requirements, where appropriate, will be an agenda item at all in process reviews (IPRs).

e. The Army Advisory Group on Energy (AAGE) and other existing DA boards, committees, and councils will serve as forums to discuss and resolve significant energy matters such as priorities, allocations, and budget restraints.

f. Programs must be designed to consider long-term improvements in energy and water efficiency that sustain the Army during emergencies, mobilization, and war.

Chapter 2
Procurement and Energy Supply

2–1. General

a. Specific procedures for coal and petroleum products supply and management are in AR 710-2. For energy resources used in utility operations, see the AR 420-series. For energy resources used in special weapon systems, see the technical manuals and supply bulletins applicable to the weapon systems.

b. Selection of energy resources will involve consideration of price, current and future availability, environmental compatibility, renewability, and life cycle cost effectiveness. Renewable energy sources and alternative fuels will be given preferences over nonrenewable sources when the other considerations stated above are balanced. (See the glossary for definitions of renewable and nonrenewable energy.) Specific DA guidance on fuel selection for new construction and rehabilitation projects is contained in AR 420-49 and Corps of Engineers Architectural and Engineering Instructions.

2–2. Procurement

a. Energy saving specifications supported by life cycle costing techniques will be included in purchasing and contracting documents for facilities and equipment. Energy saving technologies are to be used whenever possible.

b. Procurement specifications will be periodically reviewed and

updated to permit procurement of newly developed energy saving items which are advantageous to the Army.

c. Defense contractors are encouraged to adopt energy conservation practices contained in DOD regulations.

2–3. Energy Supply

a. Supply procedures will indicate concern for conservation of the energy resource and the energy used in the distribution effort.

b. Reporting procedures will include provisions for intensive management of the energy resource (see chap 4).

c. Contingency planning will include provisioning of adequate reserves.

d. Installations having heating plants of over 5 million British thermal units (MBTUs) that burn petroleum products or natural gas will have storage capacity or dual capacity per AR 420-49.

e. Heating plants that consume over 5 MBTUs per hour and burn natural gas will have dual fuel capability per AR 420-49. Other plants will have dual fuel capability when practical.

2–4. Energy acquisition in emergencies

a. DOD acquires and supplies energy products to meet Army and defense contractor requirements under existing law in the most efficient way possible. When market conditions are expected to adversely affect, or have adversely affected, the Army's ability to acquire energy products to meet its peacetime, surge, mobilization, or wartime requirements, exceptional authorities to acquire critical products may be exercised by the Army and DOD.

b. The Assistant Deputy Under Secretary of Defense, Environmental Security, Conservation and Installations (ADUSD-ES(CI)) makes determinations with regard to the need for energy product priority assistance for the Army and primary defense activities. When necessary, draft determinations will be prepared by HQDA (DALO-TSE) and forwarded to ADUSD-ES(CI) for execution.

c. Determination of actual or impending adverse effects on energy product acquisition will be based on evidence that energy market conditions have, or will soon, adversely affect the Army's ability to purchase energy products in the market and that—

(1) Waiving such provisions of law will facilitate acquisition.

(2) Access to Naval Petroleum Reserve and Strategic Petroleum Reserve crude oil is necessary to meet military petroleum requirements.

(3) Energy product priority assistance is necessary to obtain energy resources to meet national defense needs.

d. Draft findings with regard to the need for energy product priority assistance for direct Army requirements will contain, at a minimum, the information below and supporting facts. Draft findings will be prepared at the MACOM level and forwarded to HQDA (DALO-TSE), 500 Army Pentagon, WASH DC 20310-0500.

(1) The quantity and quality of energy product required to meet the national defense requirements after all steps to satisfy the activity's energy product requirement are taken.

(2) The required delivery dates.

(3) The activity, purchasing activity, and the supply location for which the energy product is required.

(4) The current or most recent suppliers of the energy product and the reasons, if known, why the suppliers will not supply the requested product.

(5) The feasibility of the activity using an alternate energy product in place of that requested and the efforts made to obtain the alternate product.

(6) The period during which the interruption in energy product supply is expected to exist.

(7) The proposed supply source(s) to satisfy the energy product requirement, which should be the historical supplier(s) of the energy product.

(8) All actions taken to satisfy the activity's energy product requirement and the results of these actions.

e. In addition to the findings listed in d, above, requests for energy product priority assistance for Army materiel contractors will contain the following information:

(1) The procurement and industrial managers responsible for administering the Army contracts priorities assistance request.

(2) The quantity and quality of energy product required daily to sustain a specific rate of production.

(3) An assessment of the impact of the energy product supply interruption on Army materiel production.

(4) The Defense Priority System rating on the contract per DODI 4400.1 and DODI 4410.3.

(5) Efforts taken by the defense contractor to seek relief from suppliers, distributors, and Federal, State and local authorities involved.

(6) The ratio of commercial to defense production at the defense contractor's plant experiencing the energy product supply interruption, and the means by which it can be ensured that the Army contractors will use the energy product supplied for Army materiel products.

(7) Actions taken by the Army to assist and advise the defense contractor.

Chapter 3
Energy and Water Management

3–1. General

a. Energy and water conservation management is based on the premise that—

(1) Readiness and training of Army forces must be maintained.

(2) Quality of life of the Army community will be maintained or improved.

(3) Decisions will be based on life cycle economic analysis and common sense in order to manage resources in the most cost effective and practical manner.

(4) Ongoing energy and water awareness programs are required to achieve significant energy savings.

(5) Effective energy and water management is a culmination of common sense, imagination, and innovative programs.

b. Commanders will include energy and water management as a special topic during staff visits and for audit, and command inspection teams. (See AR 1-201.)

3–2. Equipment and exercises

a. The administrative use of vehicles, aircraft, and other energy-consuming equipment will be kept to a level needed to maintain readiness. These items will be managed to ensure the most energy efficient combination of the following:

(1) Reduction in vehicle miles.

(2) Increased pooling.

(3) Use of load-carrying capacity.

(4) Reduction in trips for mission accomplishment, whenever possible.

b. Large-scale, energy-intensive exercises should be kept to the level required to maintain readiness. Exercise planning will include consideration of energy use impact as part of the evaluation process.

c. Engines will be turned off when vehicles are parked. Engines will not be left idling when vehicles are waiting or standing by for dispatch.

3–3. Personnel and training

a. Training and education programs will include the exchange of energy and water awareness information. They will also include the dissemination of instruction on correct practices, design, and other newly developed techniques for saving energy and water.

b. A strong internal energy information program at every level of command will be maintained. This program will foster energy awareness and management.

c. Employees' energy reduction suggestions will be encouraged through the Incentive Awards Program/Suggestion Awards Program.

d. Temporary duty travel will be controlled to encourage multipurpose staff visits and alternative means of communications such as telephone, mail or video teleconference. Consideration will be

given to the curtailment of operations during holiday periods if it can result in significant energy savings.

3–4. Facilities and building management

Energy and water consumption in Army facilities should be reduced through low-cost, common sense management actions, and preventative maintenance. These include the following:

a. Establishment of a command policy.

b. Controls for building heating and cooling systems.

c. Delamping and light turn-off opportunities.

d. Furnace inspections and operational checks to obtain reasonable efficiencies.

e. Closing doors and windows to prevent loss of energy required for heating and cooling.

f. Simple insulation and repair of heating and cooling systems.

g. Proper adjustment of thermostats and/or heating controls.

h. Establishment of installation "energy waste/abuse hotlines" where practical.

i. Appointment and training of building energy monitors.

3–5. Heating and cooling

a. Energy consumed for heating and cooling Government-owned and Government-leased space will be carefully controlled and monitored. During the heating season, temperatures in occupied general office space will be maintained in the range of 65 degrees to 70 degrees Fahrenheit (°F) during working hours and not more than 55°F during nonworking hours. Temperature in warehouses and similar active working spaces will be adjusted lower (55°F or below) depending upon the type of occupancy and degree of activity in the space. Warehouses will not be heated if they are usually devoid of human activity and if freezing or condensation are not problems. Cooling season temperatures for occupied general office space shall be maintained in the range 76 to 80°F. Within the allowed ranges, all reasonable effort should be made to maintain temperatures that a majority of the personnel find comfortable and yet results in the least consumption of energy.

b. The operation of portable heating and cooling devices is prohibited where the intent is to circumvent the heating and cooling standards outlined above. Supplemental heating and cooling may be utilized when cost effective energy reductions can be achieved by allowing major control systems to be lowered or shut down. Such devices are particularly effective where only a few people occupy a portion of a large building. Use will be closely monitored to avoid abuse.

c. Hot water temperatures for general domestic uses, administrative areas, or general cleaning will not exceed 110°F at the destination. Hot water temperatures required for the following are exempt but will not be set higher than required by applicable regulations:

(1) Industrial and manufacturing processes.

(2) Medical and food handling operations.

3–6. Humidity Control

Seasonal humidity controls will be maintained in accordance with the following:

a. Heating season humidity. This may be done for personnel comfort where increased humidity provides an equal or improved comfort level at no increase in total energy.

b. Cooling season humidity control. This may be done for personnel comfort when waste heat, or other methods not involving additional energy, is used.

c. Special requirements for humidity control. These requirements are authorized for unique laboratory, industrial, and storage applications.

3–7. Lighting

a. Energy consumed in existing facilities will be reduced by disconnecting nonessential lamps, ballasts, or fixtures. Replace low-efficiency lamps with high-efficiency lamps when life cycle cost effective.

b. Energy will also be reduced by applying applicable standards of lighting intensities to existing lighting systems. During working hours, overhead lighting will be limited to 50 foot-candles at work stations, 30 foot-candles in working areas, and 10 or less foot-candles in nonworking areas. When the detail of the work or workplace safety needs require increased illumination, this will be accomplished by supplemental lighting.

c. Off-hour and exterior lighting will be eliminated, except when it is essential for safety and security purposes as required by AR 190-11. No Army requirement exists for exterior security or fire lights over the doors of buildings.

d. Installation commanders may set a policy on the use of outdoor decorative holiday lighting.

3–8. Exceptions to energy policy

a. The policies pertaining to lighting, humidity, heating and cooling do not apply to Army Medical Department (AMEDD) facilities other than administrative areas, storage areas, rest rooms, and utility areas. Policies will be developed by TSG for AMEDD facilities.

b. Facilities with unique lighting, humidity, heating and cooling requirements may submit a request to their MACOM or installation energy coordinator, for an exception to this regulation.

3–9. Energy Conservation Investment Program (ECIP)

a. ECIP is a DOD program to reduce energy and water consumption through self-amortizing projects to retrofit existing facilities. ECIP is funded with military construction (MILCON) funds.

b. The Assistant Chief of Staff for Installation Management (ACSIM), together with the HQDA (DALO-TSE), plans, executes, and monitors Army participation, less the Army National Guard (ARNG), in the ECIP. The CNGB performs these functions for ARNG.

c. Commanders will identify and recommend to the ACSIM proposed projects for inclusion in the ECIP. This will be done in accordance with the policies and procedures contained in the programming and budget directives. (See AR 415-15.)

3–10. Other funding programs

a. Federal Energy Management Program (FEMP). The FEMP is a DoD centrally funded program based on a Defense-wide operations and maintenance (O&M) appropriation and used to accomplish energy conservation projects and activities to support Executive Order 12902, and the Energy Policy Act of 1992. The program provides DoD with transfer authority to other O&M funding accounts such as, OMA, RDT&E, PAA, OMAR, OMANG, etc. This allows flexibility in implementing energy projects throughout the Army. Funds transferred by DoD to Army O&M accounts can be used to execute projects at the installation level without impacting the installation's operating budget. Projects funded under FEMP must have an ECIP type economic analysis and are ranked by savings to investment ratio (SIR).

b. OMA funds. Utility dollars not spent as a result of saving energy can be reprogrammed during the budget year to finance other unfunded OMA projects. Any energy improvement project can be funded with OMA funds subject to the normal OMA statutory limits.

c. Energy savings performance contracts (ESPC). ESPC is an alternative procurement method to take advantage of private expertise and capital so that energy conservation can be achieved. The contract costs are paid from actual savings resulting from the contractor's actions. Commander, Huntsville Division, ATTN: CEHND-ED-PM, P.O. Box 1600, Huntsville, AL 35807-4301 has been designated as the center of expertise for ESPC and third party contracting. Installations should contact their respective MACOM energy offices for further details.

d. Third party contracting. Contracting for the construction, operation, and maintenance of a major energy plant located on an Army installation can be a least life cycle cost alternative to MCA funding and operation of a similar plant. Current legislation allows the Army to take advantage of commercial expertise, efficiency, and prudent risk in innovative energy systems. Careful evaluation of commercial alternatives must be made to ensure that the basic mission of the

installation is not compromised and that the purchased utility energy is at the lowest life cycle cost. The use of utility/energy services being provided from the private sector will be carefully investigated and evaluated before requesting MCA funding for Army-owned and operated plants to provide the same service. Installations should contact their respective MACOM energy offices for further details.

e. Demand Side Management (DSM) Program. DSM refers to utility-sponsored programs that increase energy efficiency and water conservation, or the management of demand. It also includes load management techniques. Defense Energy Program Policy Memorandum (DEPPM) 94-1 establishes guidelines for participation in DSM programs offered or to be negotiated with public utilities. Installations may enter into agreements with public utility companies for facility energy conservation audits, at no cost or obligation to the Government. Installations may apply for and accept financial incentives, such as energy efficient equipment rebates or project feasibility studies and implementation of cost sharing programs offered by utility companies. Installations may negotiate directly with utilities or contractors competitively selected by the utility for the installation of improved energy efficiency, demand or energy reduction equipment. Commander, Huntsville Division is designated as the technical center of expertise for demand side management. Installations interested in DSM programs should contact Commander, Huntsville Division, ATTN: CEHND-ED-PM, P.O. Box 1600, Huntsville, AL 35807-4301, or their respective MACOM energy offices for further details.

3–12. Energy Engineering Analysis Program (EEAP)

a. EEAP is an ongoing program to analyze and develop energy and water conservation projects for Army installations. EEAP studies are generally directed toward conducting engineering studies at high-energy-consuming facilities such as Army hospitals, boiler and chiller plants, and industrial plants. These studies often lead to ECIP type projects for installations. Among the products of the EEAP are programming documents for projects as well as identification of no-cost or low-cost-energy-management measures.

b. Study candidates will be submitted through the MACOM to U.S. Army Engineer District, Mobile, ATTN: CESAM-EN-CM, EEAP Technical Center of Expertise, P.O. Box 2288, Mobile, AL 36628-0001.

3–13. Facilities Energy Technology Service (FETS)

a. Energy efficiency can be improved by adopting energy-saving products, equipment, and devices that are cost effective and proven to significantly save energy resources.

b. Army energy conservation and energy management technical information is provided through FETS. FETS analyzes and evaluates energy conservation products, materials, and devices for their energy-saving potential, performance, reliability, maintainability, safety, and cost-effectiveness. Resources include the U.S. Army Center for Public Works (CPW) engineering staff as well as access to energy-related data banks and laboratories. CECPW also provides technology transfer through contacts with the Air Force, Navy, and DOE. CECPW will answer energy related questions and assist installations and MACOMs in choosing cost-effective, energy-saving devices. The installation ENCON or engineer can check with CECPW and determine if a device has been used successfully or not at other installations. To request information, evaluation of a product, or other FETS services, contact the following: U.S. Army Center for Public Works, ATTN: CECPW-EM, Fort Belvoir, VA 22315-3862.

3–14. Energy Surveys

Energy surveys are essential to understanding the facility energy consumption patterns and identifying possible energy management opportunities. Energy surveys can be conducted by the installation ENCON, or, if technical expertise is not available, by CECPW, Corps of Engineers Research Laboratory (CERL), local utility company, or an architect-engineer firm under contract to the servicing Corps of Engineers District. Participation by management and energy users is encouraged.

3–15. Army Energy Awareness Seminars

a. One of the key elements of a sound energy management program is individual awareness. To support the awareness program at the installation level, DA sponsors energy awareness seminars. The seminars consist of a series of workshops for supervisors, building energy monitors, engineering and production personnel, and building occupants. The seminars are funded by DA and are conducted by a DA energy team that consists of the Army Energy Office, the Corps of Engineers, a MACOM representative, and an energy management consultant.

b. These seminars include recommendations and provide the installation with specific opportunities for energy conservation and associated cost savings. MACOMs will provide a list of potential seminar sites annually to the Commander, USALIA, ATTN: LOIA-PL, New Cumberland, PA 17070-5007, no later than 30 April of each year. Negative responses are required.

c. The Army Energy Office will review the list and coordinate the proposed schedule with the MACOMs.

3–16. Army ridesharing

a. Installation or activity commanders will promote ridesharing. Ridesharing incentives, such as preferred parking for carpools, will be implemented.

b. Commanders will use and promote ride-matching services. When such services do not exist, they will be established, preferably in conjunction with nearby facilities and communities. These systems can either be manual or computerized. All systems must be in compliance with applicable Privacy Act restrictions.

c. The use of mass transportation will be encouraged. Commanders should work with local communities to adjust existing civil services to meet the needs of the installation or activity.

d. Information and assistance on ridesharing programs can be obtained from the Federal Highway Administration division office located in each State, or from the National Ridesharing Information Center, U.S. Department of Transportation, telephone (202) 366-4069.

e. The following information will be submitted by installations or activities to their MACOM and consolidated for submission to HQDA, (DALO-TSE), 500 Army Pentagon, WASH DC 20310-0500:

(1) A list of the name, address, and telephone number for each installation or facility employee transportation coordinator. Changes will be forwarded as they occur.

(2) A narrative of actions which have been taken to improve ridesharing during the period 1 Oct through 30 Sep each year. This report is due HQDA, ODCSLOG, prior to 15 Dec. The report will include any notable ridesharing achievements.

3–17. Energy Policy for Leased DOD Facilities

In accordance with the Federal Property Regulations (41 CFR, CHP 101, 1 July 1991) and Section 544(b)(2) of the Energy Policy Act of 1992, the Army is required to emphasize energy and water conservation in facilities which the Army leases directly. Section 544(b)(2) requires installations to fully consider the efficiency of all potential building space at the time of renewing or entering into a new lease.

Chapter 4
Energy Management Reporting

4–1. Defense Utilities Energy Reporting System (DUERS)

a. This chapter sets forth policies, procedures, and responsibilities for Army input into DUERS per DODD 5126.46-M-2. DUERS is designed to facilitate energy and water management by means of timely and accurate information on all energy consumption, except nuclear energy. DUERS information requirements have been assigned the requirement control symbol DD-P&L(M)1313.

b. OSD utilizes DUERS for the following:

(1) Assisting in formulating energy policy, planning, and decisionmaking.

(2) Measuring Army energy and water conservation achievements and determining Army progress toward energy goals/targets.

(3) Providing energy data to Congress, DOE, and other Federal agencies.

4–2. Army DUERS Data System (RADDS)

a. All Army data submitted to DUERS will be input by installations using RADDS. "Operating Instructions for the Army DUERS Data System (RADDS)," published by the U.S. Army Center for Public Works, ATTN: CECPW-EM, Fort Belvoir, VA 22315-3862, and the MACOM supplement to the RADDS Operating Instructions provide procedures to be used in reporting energy data.

b. RADDS facilitates energy management by providing timely, reliable, and accurate information on energy products utilized by the Army. The system provides essential energy management information to installations, major subordinate commands (MSCs), MACOMs, DA, and DOD (through DUERS). This information is used to evaluate energy trends and to determine progress toward goals/targets.

4–3. Designation of reporters

a. Army installations assigned a DoD activity address code (DODAAC) will report energy and water data through RADDS. This includes all tenants, customers, and remote bases assigned to or supported by the reporting installation. When mutually agreeable between agencies, tenants supported by one MACOM may report energy consumption through another MACOM's reporting channel. Data submitted in this manner will be coordinated between host, tenant, and LOIA-PL to ensure that all consumption is reported. When host-tenant agreements involve other military Services, the agreements must be approved by DALO-TSE.

b. Installations are responsible for maintaining local energy and related data records of sub-installations. Such records are essential when an organization, installation or sub-installation is transferred from one MACOM to another MACOM, military Service, or organization.

c. The ARNG is considered a MACOM with respect to RADDS; and each State is considered an installation. The U.S. Army Reserve Command (USARC) is also considered a MACOM; and each Army Reserve Command (ARCOM), or Regional Support Command (RSC) is considered an installation. The Corps of Engineers Districts, Laboratories, and Support Centers are considered installations.

d. Energy supplied directly to non-DoD activities (including contractors) on a reimbursable basis does not have to be reported as installation consumption, if separately metered.

e. Army activities designated as Defense fuel supply points, which handle DLA-stock-fund-owned fuels, will report according to instructions from the Defense Fuel Supply Center, the integrated material manager for bulk petroleum fuels.

4–4. MACOM responsibilities

a. MACOMs will review the data submitted by their installations during each RADDS data input window to ensure the credibility of and validate the data input to RADDS. The MACOM supplement to the RADDS operating instructions provides detailed instructions regarding MACOM actions during the conduct of an input window.

b. MACOMs will act as the primary POC for their installations regarding RADDS input and output and will work with their installations to resolve reporting problems that arise.

c. MACOMs will ensure that energy data submitted in RADDS is consistent with the annual MACOM progress report in chapter 5.

d. MACOMs will ensure their installations report to RADDS the fuel consumption of all vehicles used by the Army, Army Reserve, Army National Guard, and commercially leased vehicles. General Services Administration vehicles will be excluded.

4–5. Corrections to data

Corrections to any data may be made within 90 days of the original report date. Corrections to data older than 90 days, or to previous fiscal year data, must be submitted through the MACOM energy coordinator with a justification to CECPW for approval.

4–6. RADDS data input windows

RADDS data may be entered by users during two data input windows available each month. The data input windows are four business days beginning on the first and fifteenth of each month.

4–7. RADDS input data

a. There are three data input types shown below:

(1) RADDS-1 for all petroleum fuels, and liquified gases used for mobility.

(2) RADDS-2 for all non-petroleum fuels used for facilities.

(3) Annual building factor data.

b. RADDS-1 and RADDS-2 data will be input monthly, and the annual building factor data will be input during the June input window per the operating instructions for the Army DUERS Data System (RADDS).

c. The Defense Commissary Agency (DECA) is responsible for reporting commissary DEIS energy data and annual building factor data to DOD. Installations, upon verification that commissaries are reporting their energy data, should exclude commissary energy data from total installation consumption reporting.

4–8. RADDS output reports

RADDS provides all reporting installations, MACOMs, and assigned users the capability to display their energy data in a variety of output formats and reports. Energy managers are encouraged to utilize these reports to verify data, identify energy trends, measure progress toward energy goals/targets, and more effectively manage their energy resources.

Chapter 5
Energy Plans and Reporting Requirements

5–1. General

This chapter sets forth objectives, policy, responsibilities, and guidance for the preparation of Energy Resources Management Plans (ERMPs) and annual MACOM progress reports. The management information requirements of this chapter are assigned the interagency report control number 1492-DOE (QU).

5–2. ERMP

a. The Army ERMP covers FY 1986 through FY 2005, and describes methods and management tools available within the Army to achieve assigned goals and fulfill responsibilities of this regulation. It provides guidance for developing energy programs and establishes procedures for HQDA to collect energy data in order to report annual progress to OSD. The ERMP is structured to allow commanders to create their own unique energy programs with a minimum of coordination and policy guidance from HQDA.

b. The Army ERMP will be updated and revisions published as necessary.

5–3. MACOM ERMPs

a. MACOMs will develop ERMPs in the format issued by the DSCLOG. Commanders can optimize their energy conservation results by utilizing resources, emphasizing programs, and implementing procedures that are tailored for their particular organization.

b. MACOMs will review their ERMP annually, update as necessary, and provide copies of changes to HQDA (DALO-TSE), Washington DC 20310-0500 and Commander, USALIA, ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002.

c. MACOM commanders have the prerogative to require their major subordinate commands and/or installations to prepare individual ERMPs. Similar to the Army and MACOM plans, the ERMPs

prepared by major subordinate commands and installations should describe methods to meet energy goals and manage energy resources.

5–4. Annual MACOM Progress Report (IRCN 1492-DOE)(QU)

Each MACOM will prepare an annual progress report. This report is prepared for each fiscal year and is to reach Commander, USALIA, ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002, NLT 1 Dec of each year.

a. The annual MACOM progress report will be the official record of the MACOM's energy program for the fiscal year. The report will be a summary of energy data from the MACOM's energy-reporting activities.

b. The format for the annual progress report will be issued annually by the DCSLOG.

Chapter 6
Army Energy Public Affairs Program

6–1. General

a. The overall goal of the Army Energy Public Affairs Program is to enhance energy and water conservation awareness and to promote more efficient use of these resources without any detrimental impact on operational readiness or quality of life.

b. The primary information effort will be directed toward soldiers, civilian employees of the Army, and family members. The program will be a continual command information effort.

c. A public information effort will also be developed. It will be directed toward informing the general public and the media of the Army's accomplishments toward conservation and management of energy and water resources.

6–2. Program management

The U.S. Army Center for Public Works Public Affairs Office will—

a. Serve as the Army Energy Office's principle advisor on publicizing the Army Energy Program.

b. Serve as contracting officer's representative (COR) in executing energy awareness and promotion contracts.

c. Develop posters, video tapes, and media material to inform the Army's military and civilian personnel of specific Army policies, accomplishments, and activities in support of the energy and water conservation program.

d. Develop and execute an annual public affairs plan to promote AEP goals.

e. Provide advice and guidance to MACOM and installation ENCONs on how to effectively use and procure localized energy awareness material.

6–3. Energy and water conservation awareness

Efforts to enhance energy and water conservation awareness include the following:

a. Promoting energy-related technical and managerial training at all levels of service schools and in all training programs.

b. Encouraging and stimulating feedback on the effectiveness and problem areas of the overall program. Questionnaires and other channels of communication such as conferences and seminars will be used for this purpose.

c. Focusing on the "whys" of responsible energy and water management in addition to the "hows."

d. Promoting awards and recognition programs at all levels, providing special incentives under the suggestion awards program for energy-related suggestions.

Chapter 7
Energy Organizations

7–1. DOD

a. Environmental Security Council (ESC). The ESC is the senior level advisory group that provides ASD (Economic Security) the means to coordinate energy policy at senior levels of DOD and a mechanism to contribute valuable feedback on energy programs and problems. The Deputy Assistant Secretary of the Army for Logistics represents the Army on the ESC and directs implementation of those tasks and initiatives emanating from the ESC.

b. Energy Conservation Committee. This a joint action group consisting of the chiefs of Service Energy Offices and chaired by the Assistant for Energy Policy, ASD (Economic Security) who is responsible for making recommendations on DOD energy policy to the ESC. Subcommittees of this group include the Defense Photovoltaic Review Committee, the Geothermal Energy Coordinating Council, and the Performance Contracts Steering Committee.

c. Defense Energy Data Analysis Panel (DEDAP). DEDAP is an action officer working group composed of representatives from each of the DOD component services concerned with the DUERS and DOD energy management information.

d. Department of Defense Utilities Energy Coordinating Council (DUECC). The DUECC is composed of the Assistant for Energy policy ASD (Economic Security) as chair, a representative from each of the subcommittees and the Defense Logistics Agency. It was established to propose revisions to existing utilities energy policy and directives to reflect current and developing conditions, to provide coordination and development of new utilities energy acquisition policy, and to exchange technical utilities energy information within DOD. The two working subcommittees are—

(1) Acquisition, to coordinate actions regarding acquisition issues.

(2) Technical, to monitor technological changes that impact on procurement policy, promote transfer of technology between Services, and promote standardization.

7–2. DA

a. The Army Advisory Group on Energy (AAGE). The AAGE functions as the senior level DA forum for the review, evaluation, and presentation of policy guidance on the AEP. The AAGE has been approved by the Administrative Assistant to the Secretary of the Army under provisions of AR 15-1, paragraph 1-4.

(1) The AAGE will—

(a) Continually review Army policies, programs, procedures, and implementing instructions for their impact on energy and water conservation.

(b) Recommend new energy and water conservation policies or corrective actions as necessary.

(c) Evaluate the Army's short- and long-range energy and water conservation plans and recommend appropriate revisions.

(d) Provide a forum for coordination and the exchange of information and ideas.

(e) Determine actions required to attain Presidential, congressional, and DOD-established goals for energy and water conservation and energy self-sufficiency.

(f) Develop and provide recommendations on urgent energy and water matters.

(2) The AAGE policy group will be chaired by the Chief, Army Energy Office, Office of the Deputy Chief of Staff for Logistics (ODCSLOG) or his designated representative. Membership will consist of a principal an alternate from each of the following Army Staff agencies:

(a) ODCSLOG.

(b) Office of the Assistant Chief of Staff for Installation, Logistics and Environment.

(c) Office of the Assistant Chief of Staff for Installation Management

(d) Office of the Chief, Army Reserve.

(e) Office of the Chief, National Guard Bureau.

(f) U.S. Army Logistics Integration Agency.

(4) Names, locations, office designations, and telephone numbers of designated members for each group will be provided to the Army Energy Office (DALO-TSE). Changes in any of these items will be reported promptly.

b. U.S. Army Corps of Engineers National Energy Team (CENET). CENET is a working group formed from representatives of the U.S. Army Corps of Engineers, Army MACOMs, and selected installations. Its mission is the review, prioritization, and technology transfer of energy and water R&D performed by the various Corps laboratories. CENET is composed of the 23-member steering committee, five energy technology "users groups," three reporting technical centers of expertise, and one strategic support center.

c. The Army Energy Steering Committee. This committee is a working group comprised of action officers from DALO-TSE, DAIM-FDF, LOEA-PL, and CECPW-EM. Subject matter experts will provide technical expertise on energy policy subjects such as RADDS, publicity, EEAP, and awards. This committee makes recommendations on management of the AEP.

d. The Energy Engineering Analysis Program (EEAP) Steering Committee. This committee is a working group comprised of action officers from DALO-TSE, DAIM-FDF, LOEA-PL, CEMP and CECPW-EM. Its mission is the review and prioritization of EEAP studies.

Chapter 8
Energy and Water Conservation Programs and Awards

8–1. General
Awards will be given to deserving individuals or organizations for energy and water conservation ideas and successful energy management programs. Energy programs and awards available to Army personnel and activities are described in this chapter.

8–2. Energy Management Professional Enhancement Program
This program is offered by the Office of the Secretary of Defense (OSD) and is designed to develop mid-level energy managers who have exhibited top management potential. Participants spend six months in the Office of the Assistant Secretary of Defense for Economic Security, helping formulate and evaluate energy policy and an additional six months in the Army Energy Office helping implement the policy. Interested applicants should check with their local personnel office for further details.

8–3. Army Suggestion Program
a. The Army Suggestion Program will be used to encourage, recognize, and reward worthwhile ideas on energy and water conservation by individuals.

b. The full range of cash and honorary awards authorized in AR 672-20 should be considered so that individuals or groups who make outstanding contributions will be recognized.

8–4. Local programs
Local programs should be developed to recognize organizations and individuals that make significant contributions to energy conservation effort.

8–5. DA Certificate of Achievement
DA Certificates of Achievement recognize outstanding achievements in energy conservation and management. Certificates may be presented to either individual employees or groups of employees. DA Certificates of Achievement can be obtained by submitting a request, with a one page justification, to HQDA (DALO-TSE), 500 Army Pentagon, WASH DC 20310-0500.

8–6. Annual Secretary of the Army Energy and Water Conservation Award
a. The objective of the Secretary of the Army Energy and Water Conservation Award Program is to recognize annual energy conservation achievements of Army installations and to provide an incentive to further reduce energy consumption. The Deputy Assistant Secretary of the Army (Logistics) is the proponent for the award at the Army Secretariat level. The award recognizes the energy conservation achievements and programs of those installations in the following three categories:

(1) Active Army.

(2) Army National Guard

(3) U.S. Army Reserves (USAR).

b. For the purpose of this award, the following definitions will apply:

(1) Active Army installations are those as defined in AR 310-25.

(2) Army National Guard will be considered a MACOM and each State is considered to be an installation.

(3) Army Reserve will be considered a MACOM and Army Reserve Commands (ARCOMs), or Regional Support Commands (RSCs) in the continental United States (CONUS), U.S. Army Pacific Command (USARPAC), and United States Army, Europe (USAREUR) are considered as installations.

c. The Secretary of the Army, designated representative, will present the first place award annually to an installation in each category that had the most outstanding energy conservation program during the preceding fiscal year. Second and third place awards are presented in the Active Army category and second place awards are presented in the ARNG and USAR categories.

d. The award in each category is a trophy or other suitable memento inscribed with the name of the winning installation and presented to the installation for permanent retention. A master trophy, inscribed with the names of each year's winning installation, will be retained in the office of the Secretary of the Army.

e. Each MACOM will nominate one installation considered to have the best energy conservation program for the previous fiscal year as follows:

(1) Nominations for active Army installations are submitted by 15 February, in narrative format (see app B), to Commander, USALIA, ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070 6002.

(2) The Army Energy Steering Committee will conduct onsite evaluations of the top five active Army nominations. The nominees will be ranked based on the criteria outlined in appendix C. The site visit will include a briefing on the installation energy program, a tour of various areas on the installation that reflect energy conservation efforts, and an outbriefing by the committee. Based on the results of the site visits, recommendations for the top three active Army installations will be developed.

(3) The National Guard Bureau (NGB) will evaluate nominations submitted by the States and recommend first and second place winners. Recommendations for Army National Guard first and second place winners are submitted by 1 May, in narrative format (see app B), to Commander, USALIA, ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002.

(4) The USARC will evaluate and recommend the first and second place CONUS ARCOM. USARPAC and USAREUR may recommend their ARCOM for the award. Recommendations will be submitted per (1) above. The Army Energy Steering Committee, in conjunction with the Office of the Chief, Army Reserve (OCAR), will evaluate nominations and, based on the narrative submissions, will recommend the first and second place Army Reserve installation.

f. Recommendations will be consolidated by USALIA and forwarded to the Secretary of the Army for approval by 15 Jun.

8–7. Federal Energy and Water Management Awards
a. The Federal Energy and Water Management Awards recognize outstanding achievements in the conservation and the efficient use of energy and water, and the use of renewable energy sources by the Federal Government. The awards are presented annually, based

upon achievements of the previous fiscal year, and are awarded in the following categories:

(1) Individuals or small informal groups (two to four individuals) who were directly responsible for the achievement of significant energy or water savings or use of renewable energy, or the conduct of a significant conservation program.

(2) Organizations that demonstrate significant reduction in overall energy or water consumption and cost by wise energy or water management practices, improved efficiency as demonstrated by achievement of a significant reduction of energy or water, or initiation and implementation of an effective no-cost/low-cost program.

(3) Special awards may be granted to individuals or organizations for exemplary achievements in areas designed by the Department of Energy (DOE) for special emphasis. These areas are announced each year by DOE.

b. Annual nominations will be submitted by the MACOMs not later than 15 February of each year. This will be done in accordance with the following instructions:

(1) Each MACOM may nominate up to five candidates in the organization and individual categories and two in the special category (i.e., a possible maximum of 12 nominations).

(2) Nominations will be submitted in the narrative format outlined in appendix B and sent to LOEA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002.

(3) The Army Energy Office will evaluate nominations using the criteria in appendix C and select 10 individuals and 10 organizations for submission through DOD to the Department of Energy for evaluation.

Appendix A
References

Section I
Required Publications

AR 190–11
Physical Security of Arms, Ammunition, and Explosives. (Cited in para 3-7c)

AR 415–15
Military Construction, Army (MCA) Program Development. (Cited in para 3-8c)

AR 415–28
Department of the Army Facility Classes and Construction Categories (Category Codes). (Cited in para 4-7g(1)(a))

AR 420–49
Heating, Energy Selection, and Fuel Storage, Distribution and Dispensing Systems. (Cited in para 2-1b)

AR 672–20
Incentive Awards. (Cited in para 8-2b)

AR 710–2
Supply Policy Below the Wholesale Level. (Cited in para 2-1a)

Section II
Related Publications

AR 37–103
Finance and Accounting for Installations; Disbursing Operations

AR 200–11
Environmental Protection and Enhancement

AR 420–41
Acquisition and Sales of Utilities Services

DOD 5126.46–M–2
Defense Utilities Energy Reporting System

DOD 4500.44–I
Ride Sharing Program

Executive Order 12759
Federal Energy Management

Executive Order 12902
Energy Efficiency and Water Conservation at Federal Facilities

Energy Efficient Lighting Catalog
Defense General Supply Center Energy Efficient Lighting Catalog 1-800-DLA-BULB

Section III
Prescribed Forms

This section contains no entries.

Section IV
Referenced Forms

DD Form 1391
Military Construction Project Data (LRA)

Appendix B
Procedures for Nominations for the Secretary of the Army Energy Conservation Awards and the Federal Energy and Water Management Awards

B–1. The Secretary of the Army Energy and Water Conservation Awards are presented for the most significant energy conservation achievements within the Department of the Army; likewise, the Federal Energy and Water Management Awards recognize outstanding achievements within the Federal sector. MACOMs will submit their nominations for both awards by 15 February of each year to Commander, USALIA, ATTN: LOIA-PL, 54 M Avenue, Suite 4, New Cumberland, PA 17070-6002. The narrative format for both awards is identical. (See description below.)

B–2. Each nomination should consist of a cover page and a narrative that should not exceed five pages. Supplemental material, such as photographs or relevant documentation, may be appended; however, these materials will not be directly considered in the evaluation process.

B–3. The cover page should contain the following information:

a. Award category: Secretary of the Army or Federal Energy and Water Management (organization or individual, if Federal).

b. Nominee information: name of installation or individual, title and/or position (for individuals only), complete mailing address, telephone number, and FAX number (DSN and commercial).

c. Nominator information: name, title and/or position, complete mailing address, telephone number, and FAX number (DSN and commercial).

d. A statement as to whether or not nominee has received any other award for this achievement. (This is not an evaluation factor.)

e. An unclassified summary of the nomination, 75 to 100 words, highlighting the significance of the achievement, suitable for use in an awards presentation.

B–4. Each narrative should consist of six sections addressing the six criteria set forth below. Compliance with the prescribed guidelines is strongly recommended since deviations in format tend to delay the selection and notification process of the awards programs.

a. Energy, renewable, water, and cost savings. This criteria is divided into the three subcategories below. Nominations should only address one of the subcategories within this criteria, depending on the principle results achieved.

(1) *Total energy and cost saved.* To the extent data is available, state the amount of energy saved by the project and the amount of cost savings realized in the award year compared to the year prior to the award year and to the baseline year, FY 85. Express the energy savings in both kBtus/ft2 and total MBtus saved; and the incremental percentage change relative to the previous year, and to the baseline year, FY 85. For cost savings provide the absolute cost savings from the award year to the year prior and the incremental percentage reduction relative to the previous year.

(2) *Renewable energy produced.* To the extent data is available, state the amount of renewable energy produced by the project and the amount of cost savings realized in the award year compared to the year prior to the award year and to the baseline year, FY 85. Express the energy produced in both kBtus/ft2 and total MBtus saved; and the incremental percentage change relative to the previous year, and to the baseline year, FY 85. For cost savings provide the absolute cost savings from the award year to the year prior and the incremental percentage reduction relative to the previous year.

(3) *Total water conserved.* To the extent data is available, state the amount of water conserved by the project and the amount of cost savings realized in the award year compared to the year prior to the award year. Express the amount of water conserved in gallons of water saved; and the incremental percentage change relative to the previous year. For cost savings provide the absolute cost savings from the award year to the year prior and the incremental percentage reduction relative to the previous year.

b. Description of actions taken. Provide a detailed description of the action(s) taken to achieve the savings identified in a above. Include an explanation, where applicable, of technical efforts, organizational changes, hardware changes, energy of water information/awareness efforts, short-term (low or no cost) facilities conservation measures, long-term facilities conservation measures, mobility operations fuel-savings measures, and organizational support (e.g., command emphasis and commitment, use of building monitors, involvement of housing residents, etc.).

c. Transferability. Provide an assessment of the project's potential applications within the Army, the Department of Defense, and the entire Federal Government. Describe efforts to implement the action elsewhere, or efforts to provide documentation for use by other Government agencies. If an action has been taken, describe the new activities and state the impacts that were the direct or indirect results from the initiative. Include an account of the energy or water savings and the method for measurement. Does the effort have innovative features that make it unique? If so, list and describe each feature.

d. Effectiveness of investment. This criteria is divided into the three subcategories below. Select only one of the subcategories within this criteria, depending on the subcategory selected from *a* above.

(1) *Energy saved compared to dollars spent.* Divide the total number of Btu's saved by the total number of dollars spent for the project. Include all future savings and future dollar expenditures (capital, O&M, salvage, replacement, etc.) associated with the actions. If precise data is unavailable, use best estimates and indicate the basis for the estimates. Identify the approximate percentage of non-Federal funds (e.g. utility DSM or performance savings contract) used to accomplish the project.

(2) *Renewable energy produced compared to dollars spent.* Divide the total number of renewable energy Btu's produced by the total number of dollars spent for the project. Include all future savings and future dollar expenditures (capital, O&M, salvage, replacement, etc.) associated with the actions. If precise data is unavailable, use best estimates and indicate the basis for the estimates. Identify the approximate percentage of non-Federal funds (e.g. utility DSM or performance savings contract) used to accomplish the project.

(3) *Water conserved compared to dollars spent.* Divide the total number of gallons conserved by the total number of dollars spent for the project. Include all future savings and future dollar expenditures (capital, O&M, salvage, replacement, etc.) associated with the actions. If precise data is unavailable, use best estimates and indicate the basis for the estimates. Identify the approximate percentage of non-Federal funds used to accomplish the project.

e. Outreach, education, and user behavior.

(1) Does this effort have an educational, awareness, and/or outreach component? Describe the features of the educational, awareness, or outreach component; the type and size of the target audience benefiting from the project; and the subject areas covered by this project. Indicate any measurable impacts of this project, including the method of measurement.

(2) Does this effort have a positive and long term effect on the energy consumption patterns of a target audience? Describe the type and size of the target audience. Indicate the methods for influencing the behavior change. State the methodology and/or techniques used for determining the improvements in user behavior. Indicate follow-up provided and/or survey technique.

f. Environmental benefits. Briefly describe the kinds of environmental benefits derived from the projects or actions.

Appendix C
Secretary of the Army Energy Conservation Award Evaluation Criteria

C–1. Installation involvement

a. Command emphasis:
(1) Commander correspondence.
(2) Commander support.
(3) Staff involvement—
(a) Directorate of Public Works.
(b) Directorate of Logistics.
(c) Tenants.
(d) Public affairs officer.
b. Energy awareness:
(1) Publicity—
(a) Local newspaper/TV/radio.
(b) Posters/displays/publications.
(c) Energy contests.
(d) Energy awareness week.
(2) Car-Pooling Program—
(a) Designated parking.
(b) Implementation/execution.
(c) Publicity.
c. Energy organization:
(1) Energy council—
(a) Appointed members.
(b) Regular meetings.
(2) Energy coordinator (full/part time)—
(a) Appointed.
(b) Involvement.
(3) Energy policy references—
(a) AR 11-27.
(b) HQDA ERMP.
(c) MACOM supplement.
(d) Installation ERMP.
(e) Installation SOPs.
(4) Building energy monitors—
(a) Appointed.
(b) Duties clearly assigned.
(c) Checklists available and in use.
(d) Regular meetings.
(5) RADDS data—
(a) Accuracy.
(b) Timeliness.
d. Energy Training Program:
(1) Barracks/family housing occupant orientation.
(2) New employee orientation.
(3) Engineer training programs.
(4) Vehicle operator training.
(5) Dining facility operator training.
(6) Building energy monitor training.

C–2. Short term energy conservation measures

a. Low-cost initiatives:
(1) Energy projects in annual work plan—
(a) Priority.
(b) Innovative.
(c) Implemented.
(2) Comments.
b. No-cost initiatives.

C–3. Long term energy conservation measures

a. Energy Resource Management Plan:
(1) Current.
(2) Realistic content.
(3) Innovativeness.
(4) Implemented.
b. Alternate funding of Energy projects:
(1) Being sought and used.
(2) Innovativeness of energy coordinator/DPW.
c. Evidence of Longevity of Energy Program:
(1) Projects incorporated into—
(a) Master plan.
(b) Annual work plan.
(c) Energy resource management plan.

(2) Written command policy (installation supplement).

C–4. Overall energy resource management results

a. Savings over past fiscal year:
(1) Percent reduction in Btu/sf.
(2) Percent reduction in mobility Btu.
(3) Dollar savings for year.
b. Trends:
(1) Facilities.
(2) Mobility.
(3) Dollars.

Glossary

Section I
Abbreviations

AAGE
Army Advisory Group on Energy

AEP
Army Energy Program

AMC
Army Material Command

AMEDD
Army Medical Department

APC
Army Petroleum Center

ARCOM
United States Army Reserve Command

ARNG
Army National Guard

ASD(P&L)
Assistant Secretary of Defense (Production and Logistics)

AVGAS
aviation gasoline

BTU
British thermal unit

CAR
Chief, Army Reserve

CEHSC
U.S. Army Engineering and Housing Support Center

CENET
Corps of Engineers National Energy Team

CG
commanding general

CNGB
Chief, National Guard Bureau

COE
Corps of Engineers

CONUSA
the numbered armies in the continental United States

CPA
Chief of Public Affairs

DA
Department of the Army

DCSLOG
Deputy Chief of Staff for Logistics

DCSOPS
Deputy Chief of Staff for Operations and Plans

DCSPER
Deputy Chief of Staff for Personnel

DEAG
Defense Energy Action Group

DEDAP
Defense Energy Data Analysis Panel

DEIS
Defense Energy Information System

DEPC
Defense Energy Policy Council

DLA
Defense Logistics Agency

DOD
Department of Defense

DODAAC
DOD activity address code

DOE
Department of Energy

ECIP
Energy Conservation Investment Program

EEAP
Energy Engineering Analysis Program

ENCON
Energy Conservation Monitor

EPA
Environmental Protection Agency

ERIS
Energy Resource Impact Statement

ERMP
Energy Resources Management Plan

F
Fahrenheit

FETS
Facilities Energy Technology Service

FORSCOM
United States Forces Command

f2
square feet

FTX
field training exercise

FY
fiscal year

GAO
General Accounting Office

GOCO
Government-owned, contractor-operated

HQDA
Headquarters, Department of the Army

IPR
in process review

kBTU
kilo British thermal unit (1,000 BTUs)

LSCIP
Labor-Saving Capital Investment Program

MACOM
major Army command

MBTU
mega British thermal unit (1 million BTUs)

MCA
Military Construction, Army

MOGAS
motor gasoline

MSC
major subordinate command

MSE
mobility substitution energy

NGB
National Guard Bureau

OASD(P&L)
Office of the Assistant Secretary of Defense, (Production and Logistics)

ODCSLOG
Office of the Deputy Chief of Staff for Logistics

OMA
Operational Maintenance, Army

OSD
Office of the Secretary of Defense

PECIP
Productivity Enhancing Capital Investment Program

PIF
productivity investment funding

PIP
Product Improvement Program

POC
point of contact

QRIP
Quick Return on Investment Program

R&D
research and development

RADDS
Army DEIS Data Entry System

SD
Office of the Secretary of Defense

USALIA
U.S. Army Logistics Integration Agency

USAR
United States Army Reserve

USAREUR
United States Army, Europe

VA
Veterans Administration

WESTCOM
Western Command

Section II
Terms

British thermal unit
The quantity of heat required to raise the temperature of one pound of water by 1 degree Fahrenheit at, or near, its point of maximum density (39.1°F).

Building energy consumption
This includes energy consumed for heating, cooling, ventilation, lighting, domestic hot water, laundry, and nontactical power generation.

Foot-candle
A unit of illumination equal to that provided by a source of one candle at a distance of 1 foot.

Mobility energy
The sum of all fuel, including propane gas consumed by automobiles; boats and other water craft; aircraft; wheeled, tracked, and others that provide mobility; tactical power generation; and tactical heating. Report the consumption of all vehicles by the Army, including General Services Administration, U.S. Army Reserve, and commercially leased vehicles.

Mobility substitution energy
The facility energy used in direct substitution for aircraft, ship, tank, ground support, or other vehicle mobility energy.

Nonrenewable energy
Fuel oil, petroleum, natural gas, liquefied petroleum gas, synthetic fuels, coal, and purchased steam or electricity, or other such energy source.

Process energy
The energy utilized in the direct production or rehabilitation of equipment or goods. Energy used for heating, cooling, ventilation, domestic hot water, and lighting for facility protection, personnel comfort, general administration, or housekeeping will not be included.

Renewable energy
Solar thermal (SOL), wind (WND), geothermal (GEO), geothermal electric (GLC), hydroelectric (HYD), refuse-derived fuel (RDF), photovoltaic (PHO), reclaimed fuel oil (FOR), and wood (WUD).

Section III
Special Abbreviations and Terms
This section contains no entries.

Index

This index is organized alphabetically be topic and by subtopic within a topic. Topics and subtypes are identified by paragraph number.

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